STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES **Policy and Procedure**		POLICY AND PROCEDURE NUMBER DPDR **07.05.060**	PAGE 1 of 3
		EFFECTIVE DATE March 31, 1994	
SUBJECT **Bridges With Critical Deficiencies**		SUPERSEDES	DATED
TITLE **Maintenance and Operations**	CHAPTER **Highways**	APPROVED BY	

PURPOSE AND SCOPE

To provide guidance for bridge inspectors and maintenance personnel for dealing with bridges with critical deficiencies.

DISTRIBUTION

All holders of the Department of Transportation & Public Facilities Procedures Manual.

PROCEDURE

A. Definition and Examples

A critical deficiency is defined as the existence of a bridge or bridge-related condition that is hazardous and requires immediate corrective or protective action to safeguard the traveling public. Bridge inspectors and the authority responsible for maintaining the bridges (responsible authority) shall follow this procedure for bridges with critical deficiencies. The following are some examples of critical deficiencies:

1. Scour at or under the piers or abutments of a stream crossing where significant movement is likely and which could cause the bridge to collapse.

2. A hole in the approach roadway which may have been caused by material eroding from under the abutment or pavement, and which may constitute a hazard to pedestrians or wheeled traffic.

3. Distress in primary members to the extent there is doubt that the members can safely carry the loads to which they are being subjected, and where partial or complete failure of the bridge is a possibility.

4. Abutment or pier movement or distress which is so excessive that there is a possibility that the abutment or pier may not be capable of supporting the superstructure, and where partial or complete failure is a possibility.

5. Bearings which are displaced to the extent that portions of the superstructure may drop in elevation.

6. A crack in the tension flange of a steel stringer or the tension member of a truss, even when redundancy makes partial or complete failure unlikely.

7. Concrete material or other heavy detritus from the bridge falling onto pedestrian or vehicular traffic areas beneath the bridge.

8. Exposed deck or curb reinforcing bars, expansion joint hardware, or portions of bridge railing protruding into the roadway, and which may be a hazard to motorists.

9. Missing or severely damaged sections of bridge railing.

10. Missing or illegible load posting or clearance restriction signs.

11. When the overall bridge condition is such that a significant reduction in safe load carrying capacity has occurred and posting of 3 tons or less will result, or closure is recommended.

The preceding examples are not intended to constitute a complete listing of all critical deficiencies for which bridge inspectors are to be watchful, but are intended to demonstrate conditions where the public safety may be in jeopardy. Minor repair items that do not pose imminent hazard to the public are not to be treated as critical deficiencies.

B. Responsibility Assignments

1. Field Inspection Team Leader

a. If appropriate protective or corrective actions have already been taken to remove the immediate peril, no further field action is required except to note it in the bridge inspection report.

Appropriate protective or corrective actions could include full or partial closure of the bridge, posting to a reduced live load or speed, temporary shoring, barricading, outright repair, etc.

b. Immediately after the problem is observed, the inspection team leader shall complete the narrative portion of the bridge inspection report and take appropriate photographs.

c. The inspector shall notify the authority responsible for maintaining the bridge that a critical situation exists. The inspector may find it advisable to show the critical deficiency to the responsible authority, and at least shall describe or demonstrate the situation so that the responsible authority has a clear

understanding of the problem and methods and procedures appropriate for correcting it.

d. The inspector shall then notify the Bridge Inspection Manager or his/her designee of the critical deficiency, describe it, to whom is was reported, when it was reported, and what actions are recommended.

e. The inspector, upon returning to the office, shall write a preliminary report, including photographs, and forward it to the responsible authority requesting a written reply describing what corrective action is being taken or will be taken. A copy of the written reply should also be sent to the FHWA Division Bridge Engineer.

f. Such notifications to the responsible authority shall include a statement that if no response is received within 7 working days, the bridge may be closed.

   The responsible authority should take corrective action as soon as possible.

g. Within 7 working days of written notification, documentation shall be sent to the Bridge Inspection Manager, Mail Stop 2500, Headquarters Building, Bridge Design Section, which lists: kind of repair made, type of materials used, an estimate of repair costs, date repairs where made or signs were installed, and photos if possible, especially restrictive signs.

h. If the corrective/protective action will be delayed, the responsible authority shall be requested to provide a schedule outlining when corrective action will be taken and what, if any, interim action will be implemented.

2. Bridge Inspection Manager

   a. On notification from the inspector as described in Section III.B.1.d., above, the Bridge Inspection Manager or designee shall notify the FHWA Division Bridge Engineer in Juneau (586-7544) of the critical deficiency.

   b. The Bridge Inspection Manager shall schedule a follow-up inspection to an appropriate time, or some other method of verification shall be established, to determine whether adequate corrective/protective action has been taken.

   c. The Bridge Inspection Manager shall be responsible for maintaining the files on bridges that have critical deficiencies.